

## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

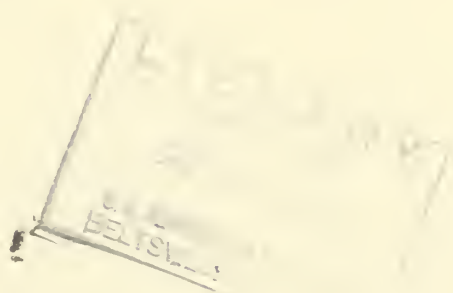


A 281.9  
Ag 83  
ERS-For. 101

THE USE AND LIMITATIONS OF IMPORT COVERAGE STATISTICS

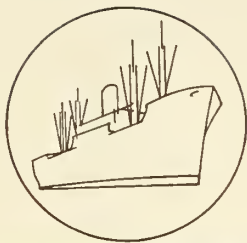
by

John P. Bogumill



Reprinted from  
FOREIGN AGRICULTURAL TRADE  
OF THE  
UNITED STATES  
October 1964

Trade Statistics and Analysis Branch  
and International Monetary Branch  
Development and Trade Analysis Division  
Economic Research Service  
U.S. Department of Agriculture



## SPECIAL in this issue

---

### THE USE AND LIMITATIONS OF IMPORT COVERAGE STATISTICS

by

John P. Bogumill 1/

Use of import coverage (or "foreign exchange cushion") statistics as an aid in assessing a country's general external economic health has increased recently. (See fig. 1.) U.S. exporters, Government officials and agricultural producers may use these statistics as an indicator of a foreign country's potential to import commercially U.S. agricultural, and other, products. These statistics measure a country's gold and foreign exchange reserves as the number of months' imports they could finance, or it expresses reserves as a ratio of annual imports. The foreign exchange cushion is an improvement over other measures formerly used (e.g., the absolute level of gold and foreign exchange reserves) in that it moves in the general direction, at least, of relating external resources to requirements. That is, it relates foreign exchange reserves to import performance. These statistics are also easily computable and readily understandable economic indicators.

Import coverage statistics are useful in measuring changes in financial conditions from one year to the next, but they need to be used in conjunction with other economic indicators in evaluating a country's relative capacity to finance imports. For example, South Viet-Nam's reserve position is considerably better than Japan's, when judged merely by months of import coverage; but, based on other information, Japan is a better potential customer than South Viet-Nam. In the case of Taiwan, reserves increased 90 percent during the past year, indicating that it is a growing potential market. A more extensive review of the external financial situation of Taiwan confirms this assessment.

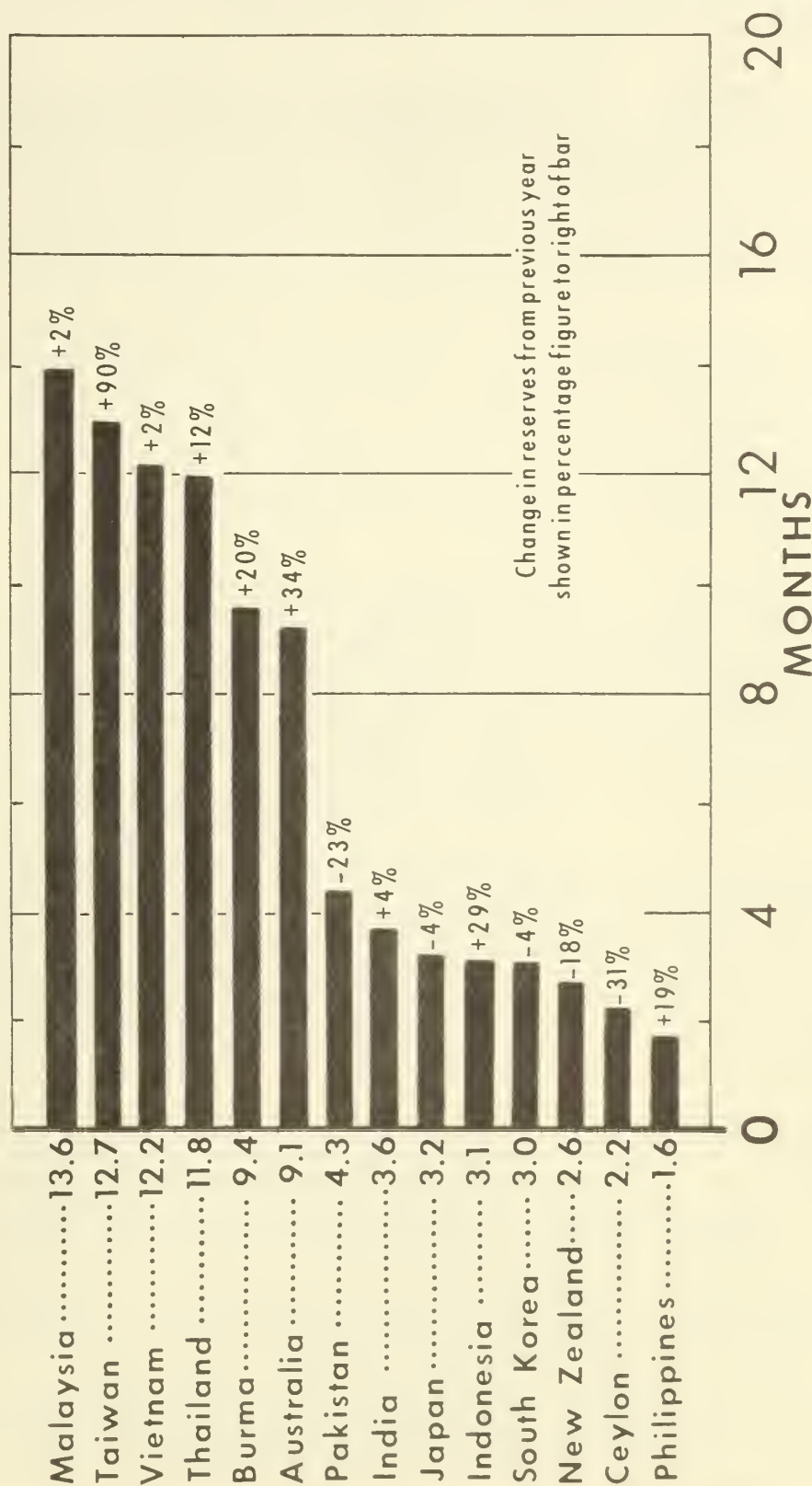
Import coverage statistics are computed for various countries and are published at irregular intervals in staff papers and research papers of such agencies as the International Monetary Fund, the U.S. Department of Agriculture, and some private concerns such as the First National City Bank of New York. None of the agencies publishes the statistics in regular periodical issues, however. Economists, Government officials, exporters, and others working in the general field of international trade may make frequent use of these statistics as a handyguide to a country's external economic condition. The U.S. Department of Agriculture uses them in connection with background research undertaken to determine the feasibility of instituting various food export

---

1/ International Financial and Fiscal Economist, International Monetary Branch, Development and Trade Analysis Division, ERS.

# THE FOREIGN EXCHANGE CUSHION

*Number of Months' Imports that Current Exchange Reserves Could Buy*



BASED ON LATEST AVAILABLE FIGURES IN INTERNATIONAL FINANCIAL STATISTICS  
JUNE 1964, INTERNATIONAL MONETARY FUND.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2969-64 (6) ECONOMIC RESEARCH SERVICE

FIG. 1

programs in developing nations under the Agricultural Trade Development and Assistance Act of 1954 (P.L. 480). Experience with import coverage statistics has revealed certain limitations of applicability.

The import coverage (or foreign exchange cushion) statistics are generated in the following manner: A nation's record of imports is determined for the preceding 12-month period and the average monthly rate of imports is computed on this basis. 2/ The nation's holdings of gold and convertible foreign exchange are determined, and this figure is divided by the average monthly import rate to yield number of months of import coverage. The utility of these statistics for analytical purposes is limited by both mechanical and conceptual considerations.

Mechanical considerations. Non-recurring disequilibrating events may inject a bias which shows up in the level of reserves. Such situations are most likely to occur in countries with foreign trade oriented economies, especially developing nations. A developing nation, for example, may receive a large, one-time transfer payment which boosts reserves above normal levels; or a natural calamity, such as a crop failure, may force a sudden drawdown of reserves. Foreign exchange cushion statistics are seldom adjusted to compensate for such unusual occurrences nor are they seasonally adjusted.

Calculation of the average monthly import rate by the simple method outlined above does not allow for current trends and developments having rather predictable effects. For example, if a nation's imports have been steadily increasing over the past year and are expected to continue increasing, it becomes misleading to base the future monthly rate of imports on a past average. The investigator may know of important trade policies or agreements, not yet implemented, which are likely to affect imports; but, there is no easy way to incorporate this information in the computation of import coverage statistics.

The limitations noted above are not unique to import coverage statistics. The data could be seasonally adjusted, and trends could be projected. Any attempt, however, to incorporate special information about trade policies, etc., would require a subjective evaluation of its relevance and result in a consequent loss of mathematical precision. The presence of mechanical defects argues for improvement in calculation of the statistics rather than against their use. These considerations are secondary, though, to the conceptual difficulties which arise in the use of these statistics.

Conceptual considerations. It is necessary to begin with some agreement as to the purpose of official gold and foreign exchange reserves. 3/ It might be assumed that such funds are held primarily as a reserve to pay for any future excess of imports over exports, just as a householder will hold a bank account to pay for purchases not covered by his current income. Similarly, within

---

2/ The implication is that future import performance will be about the same as past performance. At least it is assumed that this is implied, since the import coverage statistics are generally used as an indicator of present or potential external economic conditions.

3/ Official reserves are those controlled by the central bank or exchange authority; this definition excludes holdings of commercial banks.



the context of the specific problem of assessing a nation's potential to import U.S. products, it may be assumed that the countries with the highest levels of reserves in relation to imports (i.e. the most months of import coverage) are better prospective customers because of greater ability to pay. <sup>4/</sup> However, examination of the existing international monetary system leads one to a different view of the purpose of official gold and foreign exchange reserves. The relaxation of exchange controls, which has occurred over much of the world since the end of World War II, makes it possible for exporters to extend international credit with comparatively little risk of personal loss. Most important trading countries have developed institutions to provide their exporters with guarantees against many of the risks involved in granting credit to importers abroad. For example, the Export-Import Bank performs this function for U.S. exporters. Financial institutions with world wide connections allow exporters to dispose of commercial paper with relative ease. Importers may have access to money markets in countries with convertible currencies. The well developed commercial banking systems of England and the United States, with their elaborate and efficient network of international connections, make London and New York key centers for obtaining trade credit, thereby facilitating the settlement of trade balances. Thus, from the point of view of the exchange authority, the transactions motive for holding foreign exchange reserves becomes relatively unimportant.

Countries use official foreign exchange reserves primarily to compensate for disequilibria in their balance of payments and secondarily, over the very short term, to intervene in the foreign exchange market to keep exchange rates within prescribed margins. That is to say, reserves are used as a buffer, to isolate the domestic economy from external disturbances of an economic sort or to permit certain influences to act within the domestic economy free of external pressure. The adequacy of reserves must be judged not in relation to historical import levels but rather must be measured against the nature of the disequilibrating forces, real or potential, which they may be called upon to counteract. These forces may be classified in 4 main groups: (1) seasonal disturbances and/or business cycles, (2) structural changes, (3) domestic policies inimical to balance-of-payments objectives, and (4) destabilizing speculation. Instances of the first 2 types may occur in the country being considered, or abroad. In the case of domestic disturbances of the first type, for example, the exchange authority buys or sells foreign exchange against local currency in order to maintain the exchange rate within narrowly fixed limits during periods of disturbance known or believed to be temporary. In the second and third cases, the exchange authority will buy or sell reserves to balance the nation's external accounts while the economy adjusts to structural changes (e.g., a change in foreign consumer demand for the country's exports) or will use reserves to finance an external deficit while politically desirable domestic policies are allowed to operate to produce results such as full employment, economic growth, and price stability. The last case, destabilizing speculation may occur in connection with any of the first three, especially when the remedial action called for in each case is delayed or is inadequately applied; or speculation may occur for any of the many nebulous reasons that affect confidence in the

---

<sup>4/</sup> It has been demonstrated empirically that the demand for U.S. agricultural products does not rise proportionately with a rise in foreign exchange reserves, especially in the upper ranges. See Goolsby, O. Halbert, Foreign Gold and Exchange Reserves: Current Situation and Long-Term Trends. ERS-USDA, May 1964.

status quo. In any event, when destabilizing speculation occurs, exchange reserves are used to buy local currency in order to discourage belief in any permanent impairment in the external value of the currency.

A nation which finds itself in any of the 4 situations indicated above may have available to it resources, in addition to official reserves, to counteract disequilibria in the balance of payments. Such resources may take the form of international credit arrangements; e.g., standby credits extended by international lending institutions or by foreign commercial banks, foreign aid, or central bank "swap" arrangements. 5/ The sum of these resources, including reserves, is international liquidity. Some of the additional types of liquidity are not, however, precisely measureable since they may be attended by varying degrees of conditionality. To the extent, then, that a nation has available to it this additional liquidity, the level of reserves, as measured by months of import coverage, loses some of its significance. Reserves come to be seen as only one of a number of resources which may be brought to bear on the problem of isolating the domestic economy from external disequilibria. Indeed, the level of non-reserve type liquidity may be most important to the specific issue of assessing import potential.

To conclude, import coverage statistics, when used alone, are not an adequate indicator for assessing external economic position or for the more specific task of determining potential for the importation of U.S. agricultural products. They need to be supplemented by other, possibly more pertinent, economic information. For example, information on historical balance-of-payments performance may give some indication as to whether a current change in the level of external economic activity is cyclical or secular; information as to total international liquidity available to the country will more nearly equate potential resources to potential needs; domestic economic data may indicate something about forces which underlie, and perhaps cause, balance-of-payments disequilibrium.

Import coverage statistics may usefully contribute, however, to the making of temporal comparisons for a particular country. If import coverage improves over a certain period, it may indicate that a country has successfully reduced import levels and/or has earned enough additional foreign exchange to be able to maintain or increase present import levels. If we also know, for example, that import regulations have not been made more restrictive and/or discriminatory trade arrangements have not been extended, and that external liquidity other than reserves has not been impaired or reduced, then an increase in months of import coverage may indeed be indicative of increased import potential. Import coverage statistics can, with some improvement in computation (e.g., seasonal adjustment), be an extremely useful analytical tool when used in conjunction with other economic data.

---

5/ So called "swap" arrangements are bilateral short-term credit arrangements between central banks. These have achieved some importance among the industrialized nations and were used to support sterling in March 1961 and early 1963, and to assist Canada in mid-1962. The U.S. Federal Reserve System has reciprocal "swap" arrangements with 10 foreign central banks and credit in excess of \$1 billion equivalent is available to the United States through this mechanism. Some smaller nations have concluded such arrangements on a more limited basis.





